(c) whether Government would consider to implement integrated coastal zone management by connecting all the coastal areas in the country to avoid future disasters?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) Yes, Sir. The Government is considering installation of Bottom Pressue Recorders at a depth of approximately 6 km in the ocean and other sophisticated software to provide an early Tsunami warning system for Tsunamis of different magnitude. Scientific knowledge does not allow prediction of Earthquake but can provide forewarning after the earthquake has occurred for a possible Tsunami.

(b) The Department of Science & Technology (DST) In association with the Department of Ocean Development (DoD), Department of Space (DoS) and Council of Scientific and Industrial Research (CSIR) had organized a Brain storming session during January 21-22,2004 at Delhi to discuss the various issues related to Tsunami. Based on the discussions, a proposal has been formulated addressed to Tsunami related issues, which includes strengthening of seismological network, deployment of Ocean based sensors, data buoys, tide gauges, communincation links, R&D and public awareness. DST and DoD are the lead agencies in this effort.

(c) Information is being collected, same will be laid on the Table of the House.

Regional Tsunami warning system

408. SHRI B.K. HARIPRASAD: Will the MINISTER OF SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether UNESCO has planned to establish a regional Tsunami warning system for Indian ocean region, to be in the place by June, 2006;

(b) whether the US, Japan, Australia and Germany are keep to utilize their technology and expertise in the Indian ocean warning system;

(c) whether India and Thailand want to establish their own Tsunami warning systems; and

(d) if so, the steps being taken to avoid unnecessary and costly duplication of efforts by India?

THE MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) UNESCO has conveyed its intention for a coordinated effort for natural disaster mitigation in the Indian Ocean region but no formal proposal has been received.

(b) No proposals have been received from the countries under reference. However, these countries have expressed their keenness to help India in setting up a Tsunami Warning System in the Indian Ocean.

(c) and (d) India and Thailand are planning to set up their own National Tsunami Warning Systems as relevant to their needs. At present, there is no collaborative venture between the two countries and no details are available about the initiatives of the Government of Thailand.

Amount spent on scientific departments

†409. PROF. R.B.S. VARMA: Will the MINISTER OF SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that India Meteorological Department, Geophysics Research Institute and Vadia Institute of Himalayan Technolog together with the many universities are operating serveral earthquake monitoring centres all over the country;

(b) the amount being spent by Government on the said centres per annum;

(c) the reasons for the failure of all these monitoring centres in providing prior information about the Tsunami calamity and earthquake that hit Indonesia; and

(d) whether any enquiry has been conducted by Government against failure in providing such information?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) Yes, Sir.

(b) The amount being spent by Government on these centres is approximately of Rs. 7.00 (seven) crores per annum.

(c) There is no scientific technique available anywhere in the world to

† Original notice of the question was received in Hindi.